Product Manual

Product Name	HiFi PCR Kit
Catalog Number	CSB-DKT039
Formation	Liquid
Storage	-20 ±5 °C, avoid repeated freeze-thaw cycles; for frequent use, store at 2~8°C, protected from light
Transportation	0°C or less; Transport on dry ice
Contents	buffer、dNTPs、HiFi DNA Polymerase、GC Enhancer
Quality Control	All components have been tested and confirmed to be free of nucleases, both exonucleases and endonucleases, as well as RNase residues.
Validity Period	12 months

Product Description

HiFi PCR Kit is a ready-to-use premixed solution. The 2*HiFi PCR Mix contains HiFi DNA Polymerase, dNTPs, and an optimized buffer system.

HiFi DNA Polymerase is a highly heat-stable DNA polymerase, obtained through recombinant expression in Escherichia coli. It is a next-generation high-fidelity DNA polymerase with high amplification efficiency and fidelity. Its strong 3' - 5' exonuclease activity provides higher fidelity than Taq DNA Polymerase, along with efficient amplification. When combined with the optimized system, it can achieve a speed of 1 kb/10 s and has excellent long fragment amplification ability.

Product Components

Label	Components	Specification (50T)	Specification (100T)	Specification(500T)
1	2*HiFi PCR Mix	0.75mL	1.5mL	5*1.5mL
2	5*GC Enhancerr	0.6mL	1.2mL	5*1.2mL

Operating instructions

Recommended Reaction System

Component	Volume
ddH2O	Up to 30 μL
2*HiFi PCR Mix	15 μL
Forward Primer (10μM)	1 μL
Reverse Primer (10μM)	1 μL

WUHAN HUAMEI BIOTECH CO.,LTD
No.818 Gaoxin Avenue, Wuhan Hi-tech Medical Devices Park, Donghu High-tech Development Zone 430206, Wuhan City, Hubei Province, P.R. China.
www.cusag.cn / www.cusag.org cusag@cusag.cn +86-27-65521556/+86-27-87196282 Ext 837/853 +86-27-87196150

Template DNA	10ng-1μg

【***Notes***】***a. Primers:*** *The final concentration of primers in the reaction system is 0.2uM to obtain better results. When the reaction performance is poor, the primer concentration can be adjusted within the final concentration range of 0.1uM-1.0uM.*

b. Template : *Animal and plant genomic DNA 0.1 ~ 1ug;Escherichia coli genomic DNA 10-100 ng;λDNA 0.1～10ng;Plasmid DNA 0.1-10 ng. If the template is an undiluted cDNA stock solution, the volume used should not exceed 1/10 of the total volume of the qPCR reaction.*

c. GC Enhancer: *If the template is complex or rich in GC, GC Enhancer can be added to the reaction system. The storage concentration of GC Enhancer is 5×, and the working concentration can be adjusted between 0.5× and 2×.*

Recommended PCR Reaction Procedure

Temperature	Time	Cycle Number
95°C	3 min	1
95°C	10 sec	25-35
(TM-5)°C	20 sec	
72°C	15–30 sec/kb	
72°C	5 -10 min	1

【***Notes***】***d. Annealing temperature and time:*** *The annealing temperature needs to be adjusted according to the Tm value of the primer, and is generally set to be 3 to 5°C lower than the Tm value of the primer. The recommended annealing time is set to 20 sec, which can be adjusted within 10-30 sec.*